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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,793	08/28/2003	Gregory Cole	029211.52672US	5573
23911 7590 09/29/2010 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300				
EXAMINER				
VILAKAZI, SIZO BINDA				
ART UNIT		PAPER NUMBER		
3747				
MAIL DATE		DELIVERY MODE		
09/29/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/649,793

**Applicant(s)**

COLE ET AL.

**Examiner**

SIZO B. VILAKAZI

**Art Unit**

3747

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 92-98 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-98 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 92-98 rejected under 35 U.S.C. 103(a) as being unpatentable over Asai et al. (US Patent 6,525,430 B1) in view of Burson US Patent 3,821,570).
3. In re Claim 92, Asai et al disclose an engine generator, comprising a flywheel (76) configured as a mass of rotatable magnets (83) which comprise a unitary flywheel-alternator fan assembly for alternator power generation, also comprising:
  - a. An engine generator (13) that has a cooling fan (77) or blower configuration to create by itself the necessary air flow rate and air pressure rise necessary to force cooling air over selected areas of the engine, wherein the cooling fan is selected from the group consisting of a centrifugal fan, an axial fan and a mixed-flow fan (Column 6, Lines 10-21), and
  - b. an engine cowling (78) opposingly surrounds the cooling fan to function as at least two of a fan shroud, a fan scroll, a distributor to cool the engine and alternator, an electronic cold plate and one or more coolant ducts (Column 6, Lines 10-21).

4. Asai et al. do not explicitly disclose the adjacent magnetic material sized to carry magnetic alternator flux.

5. However, Burson discloses an engine generator, comprising a flywheel (18) configured as a mass of rotatable magnets (22) and adjacent ferromagnetic material (Item 20 and Column 2, Lines 19-24) configured to and sized to carry magnetic alternator flux and operatively mount the magnets to provide magnetic flux distribution and comprise a unitary flywheel-alternator fan assembly for alternator power generation (Column 2, Lines 49-56), wherein an inner portion of the flywheel constitutes the only connection between the rotatable magnets and associated ferromagnetic material with the engine crankshaft

6. Therefore it would have been obvious to modify the engine generator disclosed by Asai et al. with the adjacent ferromagnetic material disclosed by Burson in order to prevent/reduce leakage flux of the main magnets.

7. In re Claim 93, Asai et al. disclose a generator of Claim 92, wherein the distributor function of the engine cowling (78) separates air flow to cool at least two of an engine head, cylinder wall of the engine, oil sump and electronics (Column 6, Lines 16-21).

8. In re Claim 94, Asia et al. disclose a generator of Claim 92, wherein a fan shroud for the cooling fan is operatively associated with the engine cooling to force air through the engine cowling.

9. In re Claim 95, Asai et al./Burson disclose a generator of Claim 92, wherein the cooling fan constitutes a mechanical link between the rotatable magnets and the adjacent ferromagnetic material and a mounting portion of the flywheel.
10. In re Claim 96, Asai et al./Burson discloses a generator of Claim 95, wherein a lightweight alloy in the cooling fan constitutes the mechanical link, and the ferromagnetic material and magnets of the alternator's rotor provide the inertia component.
11. In re Claim 97, Asai et al./Burton disclose a flywheel of Claim 92, wherein the alternator rotor, inertial material and fan or blower constitute a multi-piece construction of lightweight material, ferromagnetic material, and magnets.
12. In re Claim 98, Asai et al./Burton disclose a generator of Claim 97, wherein the lightweight alloy is one of magnesium or an aluminum alloy.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 92-98 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIZO B. VILAKAZI whose telephone number is (571)270-3926. The examiner can normally be reached on M-F: 10:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SIZO B VILAKAZI/  
Examiner, Art Unit 3747

/Stephen K. Cronin/  
Supervisory Patent Examiner, Art Unit 3747